ON THE GENERA LABRICHTHYS AND PSEUDOLABRUS.

BY

THEODORE GILL, M.D., PH.D.

I.

The most characteristic genus of Labrids of the southern hemisphere—at least with reference to its number of representatives—is that which is generally known as *Labrichthys* (but which is very different from the type properly so called) and whose proper name is rather *Pseudolabrus*. That the two types or groups of species are entitled to generic rank it is proposed now to demonstrate. The fact that the confusion of the two genera has lasted for nearly thirty years, and that the erroneous name is constantly being used for some of the most common fishes, is sufficient to justify a present protest, which is not timely simply because it ought to have been made years ago.

II.

In 1854 Dr. Bleeker established a new genus, named *Labrichthys*, for a peculiar fish obtained from the island of Floris.*

In 1861 Dr. Bleeker defined a genus called *Pseudolabrus* typified by *Labrus rubiginosus* of Temminck and Schlegel, a fish occurring in Japanese seas.†

So different did these two genera appear to be to their distinguished nomenclator that he widely separated them, and referred them to distinct subfamilies in his system, *Labrichthys* being regarded as the type of one subfamily (*Labrichthyiformes*) while *Pseudolabrus* was taken as the type of another subfamily (*Pseudolabriformes.*)‡

The *Labrichthyiformes* were especially distinguished by the linear hypopharyngeal.

The *Pseudolabriformes* have a normal labroid hypopharyngeal.

In 1862 Dr. Günther combined the two genera under the common designation *Labrichthys*, and justified it by the following comment: §

---

* Bleeker, Nat. T., Ned. Ind., v. 4, p. 332.

† Bleeker, Proc. Zoöl. London, 1861, p. 415; Versl. K. Akad. Wet., XIII, 101.

‡ The *Cossyphiformes* were separated on account of the more numerous (10–13) dorsal spines and paved pharyngeals.

§ Günther Cat. Fish B. M., v. 4, p. 112.

Bleeker has established the genus *Labrichthys* for *L. cyanotænia*, and distinguished it from *Pseudolabrus* (*rubiginosus*) by the single series of teeth in the lower pharyngeal. *L. celidota* has two series; *L. tetrica*, *L. rubiginosa*, and *L. luculenta* have three. All these series are very irregular and form rather a band or a patch.

In 1863 Dr. Bleeker aptly met this comment:*

M. Günther a mal compris mon genre *Labrichthys*, qui est très-différent du genre *Pseudolabrus* et qui s'en distingue *non seulement* par un autre type du système dentaire pharyngien, mais aussi par un système d'écaillure fort différent de la tête et des nageoires, par une construction différente de la lèvre inférieure, etc. Si M. Günther avait connu mon espèce type du genre *Labrichthys* (*Labrichthys cyanotænia*) il ne serait probablement pas tombé dans cette erreur. Cependant j'ai nettement précisé les caractères des deux genres, mais M. Günther n'y a pas fait attention puisqu'il dit tout simplement (Cat., p. 112): "BLEEKER has established the genus *Labrichthys* for *L. cyanotænia*, and distinguished it from *Pseudolabrus* by the single series of teeth on the lower pharyngeal."

As Dr. Bleeker claimed, it was not his fault that the two genera were confused and should continue to be so for nearly thirty years more.

No more than Dr. Günther in 1862 have I been able to examine a specimen of the typical *Labrichthys*, but the description and figure of Bleeker compared with specimens of *Pseudolabrus* plainly show how different the two are. Those differences, susceptible of clear definition, are contrasted in the following table:

III.

LABRICHTHYS.	PSEUDOLABRUS.
Lateralis mostly tubular on each scale.	Lateralis ramose on each scale.
Frontal contour arched and elevated above eyes.	Frontal contour nearly straight, and not elevated above eyes.
Forehead scaly.	Forehead naked.
Operculum and subopercnlum expanded backwards.	Operculum and subopercnlum not expanded.
Preopercnlum scaly.	Preopercnlum naked.
Branchiostegites 5.	Branchiostegites 6.
Dorsalis and analis with deep scaly sheaths.	Dorsalis and analis without deep scaly sheaths.
Ventralis with first ray elongate.	Ventralis with second ray slightly longest.
Lips fimbriated;† lower especially developed in front.	Lips fimbriated; lower not developed in front.
Teeth.‡	Teeth distinct, uniserial except for an inner rudimentary row, generally with posterior canines.‡
Hypopharyngeal linear, with the anterior shaft atrophied, and with uniserial teeth.§	Hypopharyngeal normally labroid with the anterior shaft well developed, and with two or more rows of teeth.

* Bleeker, Versl. en Med. K. Akad. Wet. (Amsterdam), Afd. Nat., v. 15, p. 444; Ned Tijd. voor Dierkunde, v. 2., p. 69, 1865.

†Ambo labia in vela fimbriata ast indivisa producta. K. & S., LIV. 394.

‡In utraque maxilla lamina dentalis Scari ad instar, solum 4 dentibus caninis. partim sejunctis, dentes angulares canini supramaxillares liberi. K. & S., LIV, 394.

§Osse pharyngeali inferiore corpore gracili angulata dentibus conicis uniseriatis. Bleeker, *o. c.*, 154.

Certainly there are no two closely related genera of Labrids that are differentiated from each other by more numerous characters than thus become apparent between *Labrichthys* and *Pseudolabrus*. Direct comparison of specimens of the two genera would doubtless reveal others. Especially significant are the differences in the contour of the head and the relative proportions of the opercular apparatus, for they doubtless indicate decided osteological deviations. Far more important are the discrepancies between the two than such as exist between *Semicossyphus*, *Trochocopus*, *Decodon*, *Pteragogus*, and *Cossyphus*, for those genera are very closely related, and the cranial differences between most of them* are unimportant. The differences in the hypopharyngeal appear to be so great that Bleeker was probably justified in referring them to different subfamilies.

On the one hand, the hypopharyngeal of the *Labrichthyinae* seems indeed to be anomalous, judging by the illustration of that of *Diproctacanthus xanthurus*. This is represented as linear and almost semicircular, destitute of an anterior shaft and with the short row of teeth confined to the convex median portion. So divergent is such a form from that exemplified by Labrids generally that corroboration of the figure is much needed, as well as explanation how the bone is connected with the preceding branchial arch.

On the other hand, the hypopharyngeal of *Pseudolabrus* is quite typical; it has the usual long compressed anterior shaft and moderately wide surface studded with teeth; in fact, it is essentially similar to that of the typical *Cossyphiformes* and *Pseudolabriformes*.

The lips of *Pseudolabrus* are probably even much more different from those of *Labrichthys* than appears from the notices by Bleeker and by Kner and Steindach ner of those of the latter.†

The structure of the lips indeed furnishes excellent data for diagnosis of many genera of Labrids. *Pseudolabrus* differs much from the typical *Cossyphiformes* in its lower lip. The upper lip is everted and obliquely multiplicate, and the inner plicæ are villous at their margins. The lower lip is double, the outer being everted and developed as plain lobes on each side, widely separated at the chin, while the inner is erect and has a villous margin, which is free from the jaw as well as from the outer lip all around.

IV.

I have thus far discussed the questions at issue on the assumption that any further complications of the subject were unknown, and this assumption is probably not illegitimate, so far as most authors who have treated of the fishes under consideration is concerned. Indeed,

* I have not been able to examine the crania of *Semicossyphus* and *Pteragogus*.

† Labrichthys cyanotænia has lips thus discribed by Bleeker (Atlas Ich. Ind. Ned., I, 154,):—"labiis latis carnosis, inferiore bilobo lobis fimbriatis." The diagnosis of Kner and Steindachner has been given on a previous page.

Dr. Günther, in "An Introduction to the Study of Fishes" (1880), and in the later German translation, "Handbuch der Ichthyologie" (1886), retained the same arrangement of the Labrids as that proposed in 1862, adding no other genera, and suppressing or ignoring one (*Callyodontichthys*).* But there is much more to be taken into account.

In 1864, Professor Kner described a fish from the Samoa Islands with both lips having a fimbriated margin under the new generic and specific terms *Thysanocheilus ornatus*.†

In 1866, Drs. Kner and Steindachner made known another fish from the Samoa Islands, also having both lips produced and with a dentition simulating that of the scarids under a new generic and specific designation, viz, *Chærojulis castaneus*.‡

Thysanocheilus was supposed to be "most nearly allied to *Labrichthys cyanotænia* Bleek (Atlas I, Tab. 22, Fig. 1), but "in this the lower lip only is fringed, and there is only one canine in the upper jaw, at the angle of the mouth," etc.

Chærojulis was supposed to agree with *Thysanocheilus* generally and in lip structure, but to differ in dentition.

The supposed differences between the several genera in question were subsequently negatived, and *Labrichthys*, *Thysanocheilus* and *Chærojulis* were identified as generically identical and even based on the same species.

In 1867, Dr. Steindachner, having obtained a better preserved specimen of *Chærojulis castaneus*, recognized its identity with *Labrichthys cyanotænia* in the following terms:

Chærojulis castanea§ Kn. Steind. . . . ist, wie ich mich aus der Untersuchung eines später eingesendeten grösseren und besser erhaltenen Exemplares überzeugte, identisch mit *Labrichthys cyanotænia* Blkr. Die Bezahnung der Kieferstücke und die Lippenbildung ist bei dieser Art so wesentlich verschieden von der übrigen *Labrichthys*-Arten, welche Günther im Catalogc der Fische des brit. Museums anführt, dass ich sie nach Bleeker's Vorgange in das Geschlecht *Pseudolabrus* vereinige, für welche Günther's Characteristik des Geschlechtes *Labrichthys* Günth. (nec Bleeker) Anwendung findet, während das Geschlecht *Labrichthys=Chærojulis* Kn. Steind. zuerst von uns genau geschildert wurde.‖

---

*The only extralingual deviation between the English (1880) and German (1886) editions of the Introduction relates to *Crenilabrus*, viz: 1880, p. 527: "The range of this genus is co-extensive with *Labrus*. *C. melops*, the 'Gold-sinny,' or 'Cork-wing' is common on the British coasts." 1886, p. 376: "Die Verbreitung dieser Gattung fällt mit der von *Labrus* zusammen. Von den dreizehn bekannten Arten sind die meisten besonders im Mittelmeere gemein."

† Denkschr. Ak. W. (Wien), v. 24, p. 4; A. M. N. H., (3,) v. 15, p. 77.

‡ S. B. Ak. W. (Wien), I Abth., v. 54, p. 393–395, previously (p. 377) noticed as "*Platyglossus ocellatus* ? n," and described under caption "Zusatz nach *Platyglossus chrysotænia*" (p. 393).

§ *Ch. castaneus*, K. & S., LIV, 394.

‖ Steindachner's Ichthyologische Notizen (VI). <S. B. Ak. Wiss. (Wien), LVI, 332, 1867.

In 1869, Dr. Günther, having received a specimen of Labroid identified with *Labrichthys* by Col. Playfair, in a note ("Addendum") to a short article on fishes collected by him at Zanzibar, announced the following conclusions :

Colonel Playfair has sent to the British Museum an example of a small *Labroid* fish, which he regarded as a new species of *Labrichthys*, requesting me to examine it also. It proves to be identical with *Labrichthys cyanotænia* of Bleeker, but it would have been difficult to recognize it from Bleeker's description, as he has omitted to say that the ground-color of examples preserved in spirits changes into black. Beside an example sent by Dr. Bleeker as *L. cyanotænia*, the British Museum possesses an example of *Thysanochilus ornatus* of Kner. This I find is identical with the Zanzibar fish, although it appears really to be the type of a distinct genus closely allied to *Labroides*, for which the name proposed by Kner ought to be retained. The synonymy is :—

Thysanochilus cyanotænia.
Labrichthys cyanotænia Blkr.
Thysanochilus ornatus* Kner.
Samoa Islands, Flores, Zanzibar.
Specimens in the British Museum :
a. 6½ inches long. Samoa Islands. Type of *Th. ornatus*.
b. 3¼ inches long. Flores. (*L. cyanotænia*.)
c. 3¼ inches long. Zanzibar.

It is thus seen that the generic distinctness of *Labrichthys cyanotænia* from the other species associated with it was here conceded by Dr. Günther, and the questions at issue are now reduced to one of nomenclature only! The subsequent omission of *Thysanochilus* in the "Introduction" and "Handbuch" was doubtless unintentional, and simply due to forgetfulness or want of research. Dr. Günther proposed to supersede the name *Labrichthys* of Bleeker by *Thysanochilus* of Kner, and to retain the name *Labrichthys* of Günther for the bulk of the species previously erroneously confounded with *Labrichthys* of Bleeker. A more wanton disregard of the principles of nomenclature could scarcely be imagined. *Labrichthys* was instituted for the *L. cyanotænia* and for that alone,† and the terms of the diagnosis (Caput, regione oculo-maxillari excepta, totum squamosum. . . . Præoperculum edentulum ubique squamosum. . . . Pinnæ verticales squamosæ. Membrana branchiostega 5) effectually excluded the species subsequently added to the genus; it was instituted in 1854, and *Thysanocheilus* was not introduced till 1872. The only reason, then, (except thoughtlessness), that could have influenced Dr. Günther in his course was that he had committed himself by applying the former name to a large assemblage of other species. It is very improbable, however, with the facts now made known, that any others will hereafter be so influenced by the ovine propensity to follow a leader as to longer follow him in such a course.

* Kner wrote *Thysanocheilus*.

† It was suggested that *Labrus pœcilopleura* CV. might belong to the genus.

V.

The history of the two genera may be summarized in the synonymy.

LABRICHTHYS.

=*Labrichthys* Bleeker Nat. Tijd. Ned. Ind., v. 4, p. 331, 1854.
<*Labrichthys* Günther Cat. Fishes B. M. v. 4, p. 112, 1862.
=*Thysanocheilus* Kner Denksch. Akad. Wiss. (Wien), v. 24, p. 4. 1865.
=*Chœrojulis* Kner & Steind. Sitzungsber K. Akad. Wiss. [Wien], 1. Abth., v. 54, p. 393, 1866 (not *Chœrojulis* Gill, 1862).
=*Labrichthys* Steind. Sitzungsber K. Akad. Wiss. [Wien]. 1. Abth., v. 56, p. 332, 1867.
=*Thysanochilus* Günther P. Z. S., 1869, p. 241.
Type: *L. cyanotænia* Bleeker.

PSEUDOLABRUS.

=*Pseudolabrus* Bleeker, Proc. Zoöl. Soc. London, 1861, p. 415.
<*Labrichthys* Günther, Cat. Fishes B. M., v. 4, p. 112, 1862.
=*Labrichthys* Günther, 1869.
Labrus sp. Temminck & Schlegel, Richardson.
Tautoga sp. Richardson.
Type: *P. rubiginosus*=*Labrus rubiginosus* T. S.

VI.

The species of or related to *Pseudolabrus* are very numerous in the temperate southern Pacific. Most of them appear to have all the characteristics above contrasted with those of *Labrichthys*, but a few deviate and have been isolated in distinct genera or subgenera. Three such genera or subgenera have been named, viz: *Pseudolabrus*, *Austrolabrus*, and *Eupetrichthys*.

PSEUDOLABRUS.

Pseudolabri with dorsalis and analis naked and generally rounded behind, and ventrales obtuse, having the second ray somewhat longest.

The following species of *Pseudolabrus* were diagnosed by Dr. Günther under the name *Labrichthys:*

1. *P. celidotus* (G. IV, 113; G. 1876; fig. E and T., pl. 31, *f.* 1–5).
   New Zealand, Australia.
2. *P. bothryocosmus* (G. IV, 114; fig. E. and T., pl. 31, *f.* 6–10).
   Australia, New Zealand.
3. *P. psittaculus* (G. IV, 114; fig. E. and T., pl. 56, *f.* 7–10).
   Tasmania.
4. *P. coccineus rubiginosus* (G. IV, 114; Steind. and D., 1887; fig. F. Jap., pl. 86, *f.* 1).
   Japan, China.
5. *P. gayi* (G. IV, 115; fig. Gay Ich., pl. 8, *f.* 1).
   Juan Fernandez.
6. *P. inscriptus* (G. IV, 115; fig. E. and T., pl. 56, *f.* 1, 2).
   Norfolk Island, Raoul Island.
7. *P. laticlavius* (G. IV, 115, 507; G., 1867; fig. E and T., pl. 56, *f.* 3–6; McCoy, 1889, pl. 163).
   Tasmania.
8. *P. luculentus* (G. IV, 116).
   Australia, Norfolk Island.

9. *P. güntheri* (G. IV, 507; DeVis, 1884, 879.)
   Australia.
10. *P. tetricus* (G. IV, 116, not Rich.; *L. biserialis* Klunz., 1872; (fig. E. and T., pl. 55, *f.* 1)
   Tasmania, Australia (south).
11. *P. parila* (G. IV, 117).
   Australia (west).
12. *P. gymnogenis* (G. IV, 117, 507, n. sp; G., 1867; Steind., 1867).
   Australia, China.
13. *P. punctulatus* (G. IV, 118, n. sp.).
   Australia (Swan River).

Numerous species, or at least specific names, were subsequently added or confirmed, all being referred to *Labrichthys*, except *P. australis* and *P. Richardsonii*, (St., 1866.)

P. fucicola (Rich., 1840; Hutton, 1873, 265).
   New Zealand.
P. ephippium (Gthr., 1863, 116).
   Victoria.

The species subsequently discovered were chiefly described in the following periodicals and works:

Sitzungsberichte der Akademie der Wissenschaften, (Wien), by Steindachner and Klunzinger.

Proceedings of the Zoölogical and Acclimatization Society of Victoria, by Castelnau.

Philadelphia Centennial Exhibition of 1876, Victorian Catalogue, containing article by Castelnau.*

Comptes rendus de l'Academie des Sciences (Paris), by Sauvage.

Proceedings of the Linnæan Society of New South Wales, by Macleay, DeVis, Ramsay, and Ogilby.

Proceedings of the New Zealand Institute, by Hutton.

Papers and Proceedings of the Royal Society of Tasmania, by Johnston.

P. australis (Steind., 1866, 476).
   Pacific Ocean.
P. richardsonii (Steind., 1867, 332, I. N. VI, 26; provisional name for species described as *P. luculentus* Rich var.)
   Victoria.

---

* The article of Castelnau is not mentioned either in the Zoological Record or the Archiv für Naturgeschichte, and the references by Australian naturalists generally give no indication as to the manner of publication. It appears in the following work: Philadelphia Centennial Exhibition of 1876. (Melbourne, 1875.)—Official record, containing Introduction, Catalogues, Official Awards of the Commissioners, Reports and Recommendations of the Experts, and Essays and Statistics on the Social and Economic Resources of the Colony of Victoria.—Published by authority of the Commissioners. Melbourne: M'Carron, Bird & Co., ... MDCCCLXXV. [3 vo., + liv + 382 + viii, 255 + 19 + LII + v, 240 pp.] The "Researches on the Fishes of Australia" is separately paged (52 pp.), and contains descriptions (such as they are) of many supposed new genera and species. The newly named genera are *Neoniphon* (p. 4), *Breviperca* (p. 6), *Neomesoprion* (p. 8), *Aida* (p. 10), *Neolethrinus* (p. 11), *Neosillago* (p. 16), *Ellyria* (p. 21), *Pseudobatrachus* (p. 24), *Stenophus* (p. 26), *Neogunnellus* (p. 27), *Neobleunius* (p. 28), *Dampieria* (p. 30), *Neoatherina* (p. 31), *Torresia* (p. 36), *Neoodax* (p. 37), *Othos* (p. 43), *Neorhombus* (p. 43), *Neoplotosus* (p. 45). *Blanchardia* (p. 47). The descriptions are worthy of the neophyte's names.

P. tetricus var. *tigripinnis* (Klunzinger, 1872, 37).
Hobson's Bay.
P. tetricus var. *fuscipinnis* (Klunzinger, 1872, 37).
Hobson's Bay.
P. bleekeri (Cast., P. Z. S. V., 1872, 145; McCoy, 1887).
Victoria.
P. richardsonii (Cast.,* 1872, 150; 1873, 53; not *P. richardsonii* Steind).
Victoria.
P. restitus (Cast., 1872, 151=ephippium G.)
Victoria.
P. curieri (Cast., 1873, 53).
Bass's Strait.
P. bostocki (Cast., 1873, 137).
West Australia.
P. edelensis (Cast., 1873, 137).
West Australia.
P. unicolor (Cast.,† 1875).
Victoria.
P. ruber = *L. rubra* (Cast.,† 1875, 37; Klunzinger, 1880, 402).
Victoria.
P. convexus (Cast.,† 1875, 38).
Victoria.
P. lantzii (Sauvage, C. R., 1875, 988; 1880, p. 37, pl. 2).
St. Paul Island.
P. isleanus (Sauvage, 1875, 988; 1880, p. 39, pl. 3).
St. Paul Island.
P. cinctus (Hutton, 1877, 354).
New Zealand.
P. nigromarginatus (Macleay, 1878, p. 35, pl. 3, fig. 3).
Port Jackson.
P. biserialis (Klunzinger, 1880, 402).
King George's Sound.
P. tetricus var *ocellatus* (Klunzinger, 1880, 402).
Murray River.
P. roscipunctatus (Hutton, 1880, p. 455).
New Zealand.
P. dorsalis (Macleay, 1881, 87).
Port Jackson.
P. labiosus (Macleay, 1881, 88).
Port Jackson.
P. melanurus (Macleay, 1881, 89).
Port Jackson.
P. rubicundus (Macleay 1881, 89).
King George's Sound.
P. dux (De Vis, 1883, 287; 1884, 47).
Moreton Bay.
P. cruentatus (De Vis, 1884, 879).
Moreton Bay.
P. sexlineatus (De Vis, 1884, 880).
Barrier Reef.
P. rex (De Vis, 1884, 880).
Moreton Bay.

*The "*Labrichthys Richardsonii*" was not identified with the "*Pseudolabrus Richardsonii*" of Steindachner, but described as a new species.

†The three species above enumerated are attributed by Macleay to Castelnau's "Researches on the Fishes of Australia."

P. maculatus (De Vis, 1884, 881).
Moreton Bay.
P. nudigena (De Vis, 1884, 881).
Barrier Reef.
P. elegans (Steind., 1883, 195).
Gulf of St. Vincent.
P. mortonii (Johnston, 1885, 256).
Tasmania.
P. gracilis (Steind. & Dod., 1887, 273).
Japan.
P. cyanogenys (Ramsay & Ogilby, 1887, 242).
Broken Bay, Australia.

Such are the specific *names* that have been proposed for various fishes of or related to the genus *Pseudolabrus*. That they are the symbols of as many *species* is quite another matter. It is probable that a considerable number represent variations in color or sexual characters or misapprehensions as to the meaning or significance of previous descriptions. Only an exact comparative study of specimens of all, or most at least, will enable a correct judgment to be formed on the subject. Such a study is one of the greatest desiderata of Australian ichthyology, and it is to be hoped that some one of the able naturalists of the southern hemisphere will undertake it and express his conclusions *in antithetical terms*, whereby the relative degrees of affinity as well as distinctive characteristics may be understood. So far as can be judged from the descriptions, almost all of the species are congeneric, but whether such is really the case can not be determined from the descriptions because many characters have been more or less neglected. The genus, with the limits still retained, however, does not appear to be a truly homogeneous one, and there are at least two sections which may be indicated, so that future study shall be directed to the value of the characters. We venture to indicate them here.

In the typical forms represented by almost all the Australian species the membrane behind the spines of the dorsalis and analis is penicilligerous. The name *Pseudolabrus* covers them.

In one species, the *Labrichthys laticlavius* of most authors, the membrane behind the spines of the dorsalis and analis is not produced. The name *Pictilabrus* may be used to denote it. *Pictilabrus* is not only peculiar in the absence of pencils or penicillia behind the dorsal and anal spines, for the head is also smaller, and more abbreviated than in the other species. If the meaning of the name *Pictilabrus* is demanded, imagination may play that the painting of the brilliantly colored fish has been completed and that the painter's brushes and pencils have disappeared. A component of two Latin words, as in the case of *Austrolabrus*, is also better than hybrids like *Labrichthys* and *Pseudolabrus*.

Other subtractions from the genus *Pseudolabrus* (as it would be recognized by many) have been made and they may provisionally be recognized as genera, and perhaps some fishes retained in the nominal list of *Pseudolabri* may belong to one or the other of them.

AUSTROLABRUS.

Austrolabrus Steindachner, S. B. Akad. Wiss. [Wien], 1. Abth., v. 88, p. 1102 (Ich. Beit. XIII, 38), 1883.

Pseudolabri with dorsalis and analis covered with scales at bases and angulated behind, and with ventrals angulated and the first ray longest.*

By Dr. Steindachner this type was considered to be *at least* subgenerically distinct from the *Pseudolabri*, on account of the scaly dorsalis, analis and caudalis.†

A. maculatus="*Labrichthys*‡ (*Austrolabrus*) *maculata* Macl." Steind. Australia.

EUPETRICHTHYS.

Eupetrichthys Ramsay and Ogilby, Proc. Linn. Soc. N. S. Wales (2), II, 631, 1887.

Pseudolabri with dorsalis and analis naked and ventrales angulate and with the first ray elongate.

According to Messrs. Ramsay and Ogilby, "its close affinity to *Labrichthys* [*i. e., Pseudolabrus*] is at once apparent, but in such a genus, where the fin formula remains constant throughout the whole series of about thirty§ species, any departure from the normal number must necessarily carry with it a greater weight then among fishes which enjoy greater latitude in this respect." This difference, therefore, coupled with the elongate ventrals and general form,‖ has induced the authors to propose the genus.

Only one species is known, viz: *E. angustipes* R. & O., 1887, 632.

Port Jackson.

VII.

It may be added that the *Labrichthys bicolor* of Day (Proc. Zool. Soc. London, 1870, p. 695) is the *Hemigymnus melapterus* of Bleeker as was later recognized by Day himself (F. I., 1877, 396).

---

*A. *maculatus* has D. IX+12, A. III+10.

†Durch die starke Beschuppung der Dorsale, Anale und Caudale unterscheidet sich die hier beschriebene Art so auffallend von der Mehrzahl der übrigen Labrichthys-Arten, dass sie mindestens als Repräsentant einer besonderen Untergattung (*Austrolabrus m.*) betrachtet werden muss.—STEINDACHNER.

‡I can only account for the use by Dr. Steindachner of the name *Labrichthys* for this type by the supposition that in the long interval of time between his repudiation of the name and the description of the new species he had forgotten his former conclusions (see p. 395). The facts certainly had not changed meanwhile, and no species intermediate between *Labrichthys* and *Pseudolabrus* had been discovered.

§The examination of a more extended series of specimens will probably reduce this number somewhat.—R. & O.

‖*E. angustipes* has D. IX+12 and A III+11, while typical *Pseudolabri* have D. IX+11 and A. III+10. "The greatest height of the body, which is behind the origin of the anal fin," is contained in the total length 5½ times, while the head is 5 times.